REMARKS

At the outset, Applicants' representative wishes to thank Examiner Yang for the courtesy exhibited during an interview conducted on October 24, 2008. During the interview, Examiner Yang pointed out that there didn't appear to be support for the range of "9-15 mm" in Claim 1. Applicants additionally argued that the "consists of" language in some of the claims distinguishes the claimed invention over the prior art and specifically excluded iron which reduced the corrosion resistance of the aluminum alloys. Applicants additionally pointed out that the prior art did not teach the use of a porthole die or a bridge die. No agreement was reached in the interview.

Claim 1 has been amended to recite that an inner circumferential surface of the guide hole of the flow guide is separated from an outer circumferential surface of an orifice which is continuous with the bearing of the solid die at a distance of 5-15 mm. Support for the upper limit of 15 mm is provided on page 20, Example 1, lines 12-16 of the present specification. Also enclosed herewith is MPEP 2163.05 III in which *In re Wertheim* is discussed. In *In re Wertheim*, the court found that a specific example of 36% provided support for a range between 35 and 60% even though the original specification included a range of 25-60%. As stated in this section of the MPEP, the analysis must take into account which ranges one skilled in the art would consider inherently supported by the discussion in the original disclosure. The original disclosure required a distance of 5 mm or more. Therefore, a range of 5-15 mm clearly would be inherently supported by the original disclosure.

In the Examiner's Interview Summary Record, the Examiner has stated that the "consists of" language is not included in the original disclosure. The Examiner's attention is directed to MPEP 2163A I where it is stated "the transitional term "comprising" (and other comparable terms, e.g., "containing"

and "including") is "open-ended" - it covers the expressly recited subject matter, alone or in combination with unrecited subject matter." Therefore, the term "consisting of" is inherently contained in the term "comprising".

All of the currently pending rejections made by the Examiner are under 35 USC 103(a). However, as Applicants have pointed out previously, objective evidence of the unobviousness of the presently claimed invention is already of record in the present application. In the Declaration Under 37 CFR 1.132 executed on September 20, 2007 and of record in the present application, an alloy composition within the scope of the present claims was extruded with the only variable being the distance "A", which is the distance an inner circumferential surface of a guide hole of the flow guide is separated from the outer circumferential surface of an orifice which is continuous with the bearing of the solid die, was varied from 4 to 17 mm during continuous extrusion.

JP '329 did not disclose an alloy within the scope of the present claims but generically disclosed a die in which "A" could equal 4.05 to 8.05 mm. As the Examiner is well aware, a claimed range is patentably distinguishable over a disclosed range in which it overlaps if unexpectedly superior results can be shown from the claimed range. As shown in Table 2 in the Declaration Under 37 CFR 1.132 of record in the present application, at a distance "A" of 4 mm, the aluminum alloy billet was extruded under an excessively high temperature which lead to recrystallization in the surface layer and prevented material from obtaining satisfactory strength. Due to the extruded product developing cracks, the intergranular corrosion test and the stress corrosion cracking test could not be performed. This is to be compared to Specimen 2 which used a flow guide with a distance A of 5 mm.

This produced an extruded product with a fiber structure of 62% in area fraction of the cross-sectional structure and had a good strength, corrosion resistance and stress corrosion cracking resistance. Improved results were exhibited all the

way up to a distance "A" of 15 mm. At a distance "A" of 17 mm, when a successive billet was supplemented to a former billet for continuous extrusion, the end of the former billet was cut. That is, the end of the former billet was easy to deform and, as a result, when the successive billet was supplemented to the end of the former billet and was extruded, air tended to be captured where the two billets were joined, which lead to an increase in inferior parts of the product and decrease in yield rate. Applicants respectfully submit that this establishes the unobviousness of the presently claimed distance "A" of 5-15 mm. This test data is clearly closer to the presently claimed invention than any of the prior art cited by the Examiner since an alloy falling within the scope of the present claims was used in all of the tests with the only difference being the varying of the distance "A".

In order to further establish the unobviousness of the presently claimed invention, Applicants are enclosing herewith a second Declaration Under 37 CFR 1.132 in which the effect of iron on the anti-corrosive properties of the presently claimed aluminum alloy is investigated. Aluminum alloys having the composition shown in Table 1 in the enclosed Declaration were prepared where the iron composition and Alloy A were 0.1 wt.%, 0.2 wt.% in Alloy B and 0.4 wt.% in Alloy C. The alloys were extruded under identical conditions and the specimens were evaluated by a measurement of the area ratio of a fiber structure in the transverse cross-section, a tensile test and an intergranular corrosion test, which are shown in Table 2 in the declaration. As shown in Table 2, specimen 1 containing iron in an amount of 0.1 wt.% and specimen 2 containing iron in an amount of 0.2 wt.% had area ratio of fiber structure over 80%, good tensile properties and exhibited a corrosion weight loss of less than 1.0%, which confirmed that there was no problem of corrosion resistance. In contrast thereto, the corrosion weight loss of specimen 3, which contains iron in an amount of 0.4 wt.%, had a corrosion weight loss of 1.2% which markedly decreased the corrosion resistance of the aluminum

alloy. This confirms that an iron content as an impurity did not have any influence on the corrosion resistance of the aluminum alloys but an iron content over 0.2% decreases the corrosion resistance. As such, the alloys in the currently presented claims which expressly exclude iron therefrom unexpectedly have an improved corrosion resistance over iron-containing alloys.

In response to Applicants' argument that the prior art cited by the Examiner did not disclose the use of a porthole die or a bridge die in producing a hollow aluminum alloy product, the Examiner states in his summary of the interview that these types of dies are well known in the art and that the argued ratio of speed of 1.5 or less includes 1, which means the condition of a no speed change, which satisfies the claimed condition. First of all, Applicants respectfully request that the Examiner provide a specific citation of a reference which uses a porthole die or a bridge die to extrude a hollow aluminum product. The Examiner is further requested to provide a citation which shows that, in a porthole or a bridge die, the ratio of the flow speed of the aluminum alloy in a non-joining section to the flow speed of the aluminum alloy in a joining section in a chamber, where the billet reunites after entering a port section of the die in divided flows and subsequently encircling a mandrel is at 1.5 or less as required by the present claims. In the absence of such a showing, Applicants respectfully submit that the Examiner has not met his burden required under 35 USC 103(a). Favorable consideration is respectfully solicited.

Respectfully submitted,

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